### **Barefoot Memories: My Summer as a Ranger**

By Gail Melson, Teacher-Ranger-Teacher



The two things I could Sunset Strolls I led last summer park. at White Sands National Monument were a vibrant sunset and blank looks from the group when I introduced myself as a Teacher-Ranger-Teacher (TRT). A what? I would then explain that most of the year I taught 3rd graders in a school just outside Washington, DC, but that during the summer I was a park ranger at White Sands.

Visitors expected that my challenges would include the change in climate and the lack of frenzied activity. Neither of those was a problem—in fact, they were a welcome relief! The biggest challenge I faced was figuring out how to convey to my students back in Silver Spring, Maryland what a unique and utterly amazing place White Sands National Monument is—especially since they may never get the chance

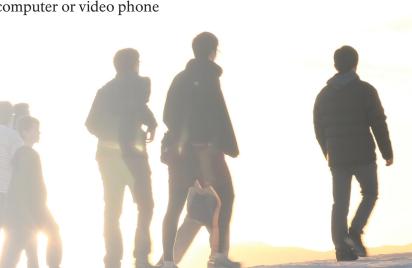
to walk barefoot in the sand while sledding in the heart of the dunes on a sizzling hot day.

The TRT program was set up to create ambassadors between the National Park System and Title 1 (high poverty) schools. The people Since returning to Maryland, who established this program were I have taught mostly 3rd but wise in realizing that teachers are a natural way to create supporters among the younger generation. My school has a very high poverty rate and a primarily immigrant population. Both of those factors mean that the children in my school probably wouldn't grow up with warm memories of visiting our collectively-owned national ■ always count on during the treasures that are our national

> In addition to learning a lot about the park in eight short weeks, I got some ideas from other NPS sites about what programs each park provides for teachers. I left with the idea of being part of establishing a Ranger in the Dunes program that could be established with computer or video phone

connections between White Sands and distant schools. The NPS calls it "distance learning." I call it a great way for students to make personal connections to parks and park rangers.

some 4th graders about different national parks. On the first day of my biweekly class, I asked for the students to tell me what they already know about national parks. The responses included: they have great rides and food, and they have good playground stuff. Four months later, my students can talk all about sled dogs in Denali, bats at Carlsbad, geothermal features at Yellowstone, and how canal locks work at the C&O Canal. They will learn about White Sands in future weeks, and, with any luck they will get to meet a ranger in the White Sands dunes and ask her or him lots of questions. I predict that they will love it!



Visitors enjoying the Sunset Stroll

### **Flat Hat Verse**

From the Beginning By Mimi Gorman, Seasonal Ranger

Ancient sea life rests indiscernible as if it never existed, time transformed into a white mineral forced above the sea into bands across mountains. Dissolved by rain the solid disguise returns home but not as the sea it once was. Its beauty becomes a crystal lake, whose memories shatter. Opaque tarnished shards break and break and break, again transformed sand-like, unrecognizable, captured by the wind, gathered into shifting dunes of cool white gypsum.

### White Space By Mimi Gorman, Seasonal Ranger

Seemingly alone in endless white space where trees hold strong and yuccas grow long in the sand is a troth to steady their growth where lizards once brown now white on the ground and a moth just the same a refuge they claim where my reflection is not and my footprint I spot til the next breath of wind changes the bend of the white sand dunes for which I swoon

### **Our Partners**

Western

National Parks Association

Western National Parks Association (WNPA) has been a charitable non-profit cooperating association of the National Park Service (NPS) since 1938. As a partner of the NPS, WNPA supports parks across the West by developing products, services and programs that help discover, capture and share park stories in order to enrich the visitor's experience. We work to connect new generations to parks in meaningful ways, all with one simple goal: create advocates who want to preserve

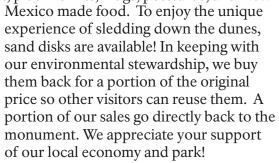
and protect these special places for everyone, for all time.

In addition to operating NPS stores at 66 locations in 12 states, WNPA hosts and co-sponsors a variety of interpretive and cultural events at these sites. For more information about events and programs, visit WNPA.org or contact an NPS site. Thank you for joining us in supporting the NPS.

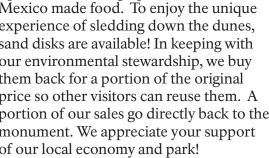


White Sands Trading Gift Shop is the official concessioner of White Sands National Monument, authorized by the NPS to serve the public. We have proudly joined the NPS in preserving this rich ecosystem for generations to come. We offer meaningful mementos that educate, recall, and pay tribute to the diverse facets of the Tularosa Basin.

You'll find many unique gifts and souvenirs including Native American



jewelry, local handcrafts and art, plus T-shirts, mugs, postcards, and New Mexico made food. To enjoy the unique



# White Sands

National Park Service U.S. Department of the Interior

White Sands National Monument



# Spring/Summer 2015 Vol. 5, Issue 1

### The Wonder of the Dunefield: **Delighting Visitors for Over 10,000 Years**

By Bob Hoelscher, Volunteer and Tara Cuvelier, Visual Information Specialist

Why did you visit White Sands National Monument today? Was it for an amazing sunset or to do a bit of exploring as you hike one of our trails? Did you plan your trip here or did this strange island of white catch your attention as you drove by? Whatever your reasons are, you're in good company. People have been visiting this vast expanse of gypsum sand for thousands of years.

Over 10,000 years ago, humans first entered what we now call the Tularosa Basin, following herds of large animals like mammoths and bison as they moved across the landscape. They built homes along the shores of Lake Otero, the remnants of which are comprised of the dunefield, Lake Lucero, and Alkali Flat.

The Apache arrived in the basin in the late 1500s. By this time, Lake Otero had long way to selenite crystals and glistening white sand. For the Apache, the dunefield was a source of sustenance, both spiritual and physical. They gathered plants from its edges and hunted small game.

When Europeans came to the basin, the dunefield was largely overlooked until the town of Alamogordo was established by the railroad in 1898. By that time, some began looking at the dunes in a new light—the

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light of commercialism. A debate soon began over the value of the gypsum sand. Some wanted to capitalize on this amazing resource by mining it and making plaster, bricks, and wallboard. Others saw it as a natural wonder that needed protection and preservation. By 1933, the conservationists won and the most impressive portion of the dunefield was designated as White Sands National Monument by President Herbert Hoover.

On its official dedication day on April 29, 1934, around 4,650 visitors arrived in some 776 vehicles to take part in gala festivities. Since then, it has continued to be a popular destination for locals and tourists alike. Over the years, visitation has steadily increased and the park now sees an average of 500,000 visitors a year.

What makes this place so unique since dried up, its waters giving that people will travel thousands of miles—even half-way around the world—to visit the dunes? Perhaps they come to see the unique plant and animal species that have adapted to this harsh environment. Maybe it's the aweinspiring experience of watching this shimmering landscape slowly

Stay Connected for the latest park news and events...

Follow us

on Twitter!

change colors under a blazing sunset. Most importantly, though...why did you come here? Regardless of your purpose, may vour highest expectations be fulfilled and exceeded!



with water during the rainy season. Tours are given once each month from November

Visitors sledding on the dune

Scan here to visit

### The Superintendent Says...

Welcome to White Sands National Monument!

The staff, volunteers and partners invite you to explore and discover what makes the monument special and memorable. We are committed to "... the preservation of the white sands and additional features of scenic, scientific, and educational interest..." and to offering YOU opportunities to make new and exciting connections.

Monument staff and volunteers have filled this issue of Footprints with articles about the fascinating history of the Tularosa Basin and the diversity of the gypsum environment in which White Sands lies. My role is to ensure you have opportunities not only to appreciate the dunes but to understand the complexity of the desert environment. As you enjoy your visit, take time to learn about the unusual desert ecosystem that surrounds you by checking out the visitor center and museum as well as joining at least one of our ranger-led programs and special events.

In addition, the newspaper is full of safety tips for your family while our *Leave No Trace* section includes thoughtful ideas for your consideration during your stay within the monument.

I look forward to hearing from you at whsa\_superintendent@nps.gov or at the address listed under park information.

Marie Frías Sauter Superintendent

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### **Published By**

White Sands National Monument

### Superintendent

Marie Frías-Sauter

### **Editor**

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### **Park Mailing Address**

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### Phone

(575) 479-6124

### **Email**

whsa\_interpretation@nps.gov

### Website

www.nps.gov/whsa

### **Visitor Center GPS Coordinates**

32° 46' North, 106° 10' West

### **Guns in Parks**

As of February, 2010, federal law allows anyone who can legally possess firearms to possess unloaded guns within the park but not inside federal buildings.

### **Drones in the Monument**

As of September, 2014, all forms of unmanned aircraft are prohibited within the monument.

### **EXPERIENCE YOUR AMERICA™**

The National Park Service cares for the special places saved by the American people so that all may experience our heritage.

### The sand, plants, crystals, and animals of the monument are national treasures.

We know it is tempting to take home a souvenir, but even attempting to remove natural objects from within the monument is not just a matter of taking home a small bag of sand or a really cool selenite crystal. It's also a matter of robbing others of the chance to enjoy them, too.

And, if that's not bad enough, consider that it is also a violation of federal law (36 CFR 2.1) that carries with it a hefty fine and can result in criminal charges!

# **IN CASE OF EMERGENCY, CALL 911** OR (575) 437-2210 24-hours a day

During monument hours, contact a park ranger by calling the visitor center at (575) 479-6124, ext. 236 or the entrance station at ext. 206.

## **Information and Services**

Dunes Drive
Hours for the Dunes Drive vary by season. Due to missile testing or inclement weather, it is sometimes closed. Please call ahead to confirm hours or check our website at www.nps.gov/whsa.

### Fees

Monument entrance fees are \$3 per person 16 and older; children 15 and under are free. Federal park passes are accepted and are also available for purchase at the entrance station. Credit cards accepted.

# Visitor Center & Gift Shop The visitor center and gift shop

are open 364 days a year, closing only on Christmas Day. Hours of operation vary by season. Please call for specific times or for information on missile closures.

### **Backcountry Camping**

park, but 10 primitive backcountry sites are permit. First-come, first-served; no advance are available on a first-come, first-served reservations; special fees apply.



Pets
Pets are permitted within the monument but must be leashed and under control at all times; you are required to clean up after your pet. Pets are not permitted inside any buildings.



Are horses allowed

in the monument?

Tisitors are welcome to ride

We do, however, ask that you do

not ride on any established trails

or through any of the picnic

required to check in at the

for the horse trailer area.

areas. Visitors with horses are

entrance station and receive a

horse use permit. Check the map

**V** their horses in the monument.

ATVs and Off-Roading
ATVs and other off-road vehicles are not allowed in the monument. Driving on the dunes or interdunal areas is strictly prohibited. Violators will be fined.

remainder of the year.

### **Accessibility**

The visitor center, auditorium, museum, gift shop, restrooms and boardwalk are wheelchair accessible.



### Restrooms

Restrooms are located in the small building next to the visitor center. For your convenience, pit toilets are also provided at the picnic areas, Dune Life Nature Trail, Boardwalk, and Evening Program Area gate.

Bicycles
The Dunes Drive is open to visitors who would like to ride their bikes through the monument. For safety reasons, we ask that visitors please be very aware of vehicle traffic and any blind curves on the road.

### Picnic Areas

Vehicle camping is not allowed in the There are three established picnic areas in the monument, complete with available. Ask in the visitor center to obtain a canopied tables and grills. These picnic sites basis. Tables cannot be reserved in advance.

Recycling
Containers for aluminum and plastic recyclable items are located in front of the visitor center and near the entrance to the gift shop. Help keep the park clean and place your recyclables in these receptacles.



### Sledding

Sledding on the dunes is allowed in the loop portion of the Dunes Drive, where there is little to no vegetation. When choosing a sledding location, make sure you will not be sledding into the road. New and Alcohol

Alcohol is prohibited in the park from shop. Visitors who return their sleds with a receipt can sell them back for a portion of the purchase price.

### **Missile Tests and Road Closures**

rom time to time, White Sands Missile Range performs ▲ 'missile tests that may close Highway 70 to traffic. Depending on the nature of the testing, they may also require us to close the Dunes Drive for a few hours. During these times, the visitor center remains open. Visitors are invited to view the museum exhibits or peruse the bookstore and gift shop while they wait for everything to reopen. If you are planning on traveling to White Sands National Monument and would like to know if either the highway or monument are closed, call us at (575) 479-6124, ext. 236.



# **Junior Rangers**

### The Leave No Trace Game

**Developed by Robin Milne, Park Guide** 

Practicing Leave No Trace means treating nature with respect. Learn what happens when you do or don't follow Leave No Trace principles by playing the game below. First, read the rules of Leave No Trace to the right. Find a game piece (coin/small piece of paper). Then, use a coin and flip it for each turn to play the game below. Heads - move one space. Tails - move three spaces.

### 7 Principles of Leave No Trace

- Know Before You Go
- Choose the Rigth Path
- Trash Your Trash
- · Leave What You Find • Be Careful With Fire
- Respect Wildlife
- Be Kind to Other Visitors



You plan ahead and **prepare** for your trip by studying the rules and map Move ahead 2 spaces.

You hike on stable surfaces by staying off the crucnchy soil. Move ahea

> hotograpl and get too

close. It slithers away. You are lucky it didn't come at you! Move back 2 spaces.

pack out everything you brought with you, including your trash and leftover food. Move ahead

You cut down a yucca stalk back 3 spaces.

to use as a walking stick. Mov

ou left food at a picnic table

and a kit fox eats it. **Go back** 

to the beginning.

You find something on the trail and leave it just how you found it. Move ahead 1

You cook with a backpacking stove

so that you don't melt the sand.

Move ahead 3 spaces.

Your **not prepared** for a hike and you forget water, a hat, or sunscreen. Move back

### Congratulations!

2 spaces.

By practicing Leave No Trace you have left White Sands beautiful Everyone who visits after you will be able to experience the natural beauty and treasures the way you did! Thank You!

You carve your initials into a pedestal and damage the natural beauty. Go back 1 space.

ou safely sled away from the oad and **respect** other visitors y not screaming and shouting. Move ahead 4 spaces!

### Leave No Trace: Frontcountry Principles By Tara Cuvelier, Visual Information Specialist

Cover of the NPS Leave No Trace video

**T**f you've done any camping or **⊥**hiking in the last several years, you're probably familiar with the backcountry principles of Leave No *Trace*. But did you know that there are guidelines for the frontcountry too?

Simply put, frontcountry consists of day-use and developed areas as opposed to undeveloped or wilderness areas and places that are not accessible by vehicles. To give a more specific definition, according to Leave No Trace, "frontcountry is composed of outdoor areas that are easily accessible by vehicle and mostly visited by day users."

Since the frontcountry is the most heavily used area at White Sands, the following seven principles will help you enjoy the park safely.

1) Know before you go

- Before you even pack your car: Bring food, water, and clothing to help protect you from cold, heat
- Pack a leash for your pet and plastic bags to pick up pet waste.

2) Stick to the trails and Camp Overnight Right

- Whether hiking or camping: Stick to designated trails and
- campsites. Follow trail markers. • Avoid walking through interdunal areas or stepping on plants.

3) Trash your trash and pick up poop Pack it in and pack it out:

- Dispose of your trash in the garbage bins provided.
- Use the pit toilets located at each trailhead and picnic areas. Pick up your pet's poop and

dispose of it properly in garbage

bins. This goes for horses as well. Dispose of unfinished beverages and water in garbage bins. Never pour them out onto the sand or in the picnic or parking areas.

4) Leave it as you find it Collecting a souvenir may sound cool but carries a hefty fine:

- Leave plants, rocks, sand, animals, and historical items where you find them. This includes dead plants.
- Leave plant pedestals in pristine condition. Carving words or drawings into them is vandalism.

5) Be careful with fire Everyone loves a good campfire

- Dead yucca stalks, etc., are natural objects protected by federal law. It should not be collected for firewood.
- Use a campstove or grill to cook your food. Ground fires are not permitted—they damage the sand.
- Let coals cool completely. Never place hot coals in garbage bins.
- Dispose of uneaten food in garbage bins. Don't burn food or trash in park grills.

6) Keep wildlife wild They may look cute but many of our animals are venemous:

- Observe animals and insects from a distance. Don't pick them up or try to play with them.
- Human food is unhealthy for all wildlife. Feeding it to wild animals can make them sick.

Both people and pets love the gypsum sand but remember:

7) Share our trails and manage

- Be considerate when passing other people on a trail.
- Pets must always remain on a leash and under your control at all times. Avoid making loud noises or

yelling and enjoy the sounds of

- It gets really hot here! Never leave your pet in your vehicle unattended.
- \*\* This copyrighted information has been reprinted with permission from the Leave No Trace Center for Outdoor Ethics: www.LNT.org

White Sands National Monument

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# In the Heart of the Dunes

### **Badgers at White Sands National Monument:** An In-Depth Look at a Secretive Creature

By Dr. M. Hildegard Reiser, Ph.D., Science Advisor, Chihuahuan Desert Network

**D**adgers in the desert? How Bstrange! Well, at least that's what most people think when they first learn that badgers live right here at White Sands National Monument. Although most people associate them with forests, badgers make their homes in the desert as well.

The American badger (*Taxidea taxus*) is found throughout western and central United States. In the southwest, they are primarily associated with grasslands and desert scrublands. In Mexico, where this species is also found, it is called tlalcoyote or tejón.

The badger eats a variety of burrowing animals but here at White Sands, it has a more restricted diet that consists mainly of southern plains woodrat, kangaroo rats and



Launch Complex 33

Dating back to 1945, the blockhouse and V-2 assembly

building are among the original

buildings constructed at White

used to test the newly captured

operation 'Paper-clip', LC-33 was

Experimental launch of captured German

V-2 rocket at White Sands Missile Range

Sands Missile Range. Part of

A badger burrow in the gypsum sand

other small rodents, lizards, and

Although mostly nocturnal, in remote places like White Sands NM, badgers can occasionally be observed during the day. This is especially true of females with babies, who tend to forage during the day and spend the nights with the young. In the winter, badgers seldom venture above ground unless the temperatures are above freezing. Those in this area do not hibernate but go into a state of torpor (a state of

The blockhouse was designed by

Dr. Del Sasso from CalTech. It had

ten-foot thick reinforced walls and

a 24-foot pyramid-shaped roof to

protect the men inside from falling and

exploding V-2 rockets. The windows

looking out of the blockhouse had a

very narrow field of view because the

blockhouse a terrible place to actually

sky. Two periscopes poking out of the

blockhouse made it possible to ensure

the area was clear before proceeding

with a launch.

watch the rocket ascending into the

walls were so thick. This made the

animals. Badger burrows that are abandoned may then be occupied by kit foxes, skunks, desert cottontails, and black-tailed jackrabbits. Abandoned burrows also provide ready-made homes for Burrowing

Badgers are solitary creatures, only found together during the breeding season (late summer–early fall) and mothers with their pups (2-3 young per litter). Female badgers are unique in that they experience delayed implantation. They delay their pregnancy until this time of year (December–early February). This is done so that the young are born in a more favorable time of year between March and April. Families usually break-up between June and August with the juveniles dispersing to new unoccupied areas, though the females may share their mother's territory.

Because they are aggressive animals, badgers have few natural enemies. Dispersing juveniles in the park are probably only attacked and eaten by bobcats (which are also uncommon in this area). The most important threats to their survival include loss of habitat, shooting, and trapping. Badgers typically live 9-10 years in the wild and may need as much as 2.000 acres of suitable habitat to have enough food and other resources to live and raise a family.

American Badger

carrion, as well young Burrowing Owls.

> temperature). With their strong muscular legs and long front claws, badgers are able to dig through the hard, compact gypsum soils, both in search of prey and to create deeper burrows for themselves that are used as dens. Since they are not common in the park, the badgers that are here are even more important for providing homes for many other desert

By Adam Ewert, Student Intern

### Missile Park and Museum located inside White Sands Missile Range. Would you like to see them? You'll just need your driver's license,

insurance.

575-678-8824 or visit www.wsmr-history.org.

vehicle registration, and proof of



lowered physiological activity

typically characterized by

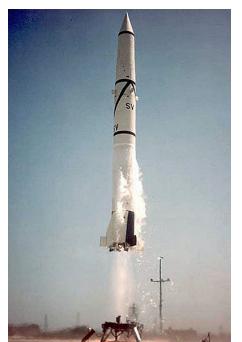
reduced metabolism, heart

rate, respiration, and body

Aerobee Hi missile, White Sands Missile Range

Over 100 V-2 missiles were launched from the site that broke speed and altitude records, bringing us ever closer to freeing ourselves from the pull of Earth's gravity. The knowledge gained through the tests performed here are responsible for our first generation of rockets. These include the Corporal, Atlas, Redstone, Nikee, and Aerobee. The Redstone and Atlas rockets went on to carry our first Astronauts to outer space in the Mercury and Gemini programs.

Recognizing the importance of our first major foray into rocketry, the National Park Service designated LC-33 as a National Historical Landmark in 1985. Today the blockhouse is no longer used for testing missiles but the site still remains part of an active test complex. As a result, LC-33 is closed to the public. However, many of the missiles launched from LC-33 and more are on display at the



PGM-11 Redstone rocket at Cape Canaveral, Florida on September 17, 1958

# Información del Monumento

### EN CASO DE EMERGENCIA, LLAME 911 o (575) 437-2210 24-horas al dia

Durante este horario, póngase en contacto con un guardaparque llamando al centro de visitantes en (575) 479-6124, ext. 236 o la estación de entrada en ext. 206.

# Información y Servicios

Centro de Visitantes
Cuando entras en White San National Monument va a ver el hermoso centro de visitantes de adobe a su izquierda. El centro de visitantes es histórico y fue construido a partir de 1936 a 1938. Los ladrillos de adobe están hechos de arena, paja y agua todas fácilmente disponibles en el área. En el centro de visitantes, se puede obtener información sobre los programas dirigidos por guardaparques del día, ir de compra en la librería; explorar el museo y quedarse hipnotizado por las vistas de White Sands National Monument en nuestra película de orientación de alta definición en el teatro. En la zona del centro de visitantes también se conecta a la tienda de regalos. La tienda de regalos vende refrescos, recuerdos y trineos. Sólo se puede obtener agua en la zona del centro de visitantes. No hay agua disponible en las zonas de dunas.

Comience su exploración de White Sands National Monument en el museo. Las exhibiciones le ayudarán a entender la geología de las dunas de yeso, como las plantas y animales sobreviven en este ambiente hostil, pero bella y la vida de los habitantes humanos por diez mil años. El teatro está localizado al lado del museo. La película, "A Land in Motion" ("una tierra en movimiento") dura 17 minutos y empieza cada hora y media hora. Las exhibiciones y la película se presentan en inglés y español.

# \$ Taquilla de entrada

El costo para entrar al monumento es 3 dólares por adulto de 16 años de edad o más. Los niños de 15 años o menos entran gratis. Guarde su recibo, sirve para entrar al parque por 6 días adicionales. Se aceptan y se pueden adquirir pases de parques federales. La taquilla de entrada acepta dinero en efectivo, cheques o cheques de viajero, y tarjetas de crédito o débito.



# La carretera del parque Dunes Drive es un camino de 8 millas

(13 km) por el corazón de la zona de dunas de yeso. Se trata de unas 16 millas (26 km) en coche de ida y vuelta volviendo al centro de visitantes en 45 minutos sin contar las paradas. Las primeras 5 millas (8 km) de Dunes Drive están pavimentadas y las últimas 3 millas (5 km) del camino son de yeso compacto. El camino es apropiado para automóviles, motocicletas, vehículos de recreo y autobuses. A lo largo del camino se encuentran las paradas de información, senderos, áreas de picnic y áreas de estacionamiento para parar y caminar por las dunas.

### Caminata

Tómese unos minutos para explorar el parque a pie. Los senderos le permiten explorar las maravillas del monumento de cerca. Puede disfrutarse de cinco senderos diferentes en el monumento. Tenemos senderos fáciles y senderos más difíciles para los caminantes con experiencia.

### Baños Públicos

Baños públicos principal está situado en un edificio al lado del centro de visitantes. También hay aseos primitivos localizados en las áreas de picnic, de sendero Dune Life v sendero tablado elevado.

### 7 Picnic

Las áreas de picnic se encuentran en la porción del recodo de Dunes Drive. Hay tres áreas de picnic "Primrose", "Roadrunner" y "Yucca". Las áreas de picnic están disponibles por orden de llegada. No se pueden reservar de antemano. Cada sitio tiene una mesa de picnic con techo y parrilla.

# Trineo

### Bajar las dunas en trineo es muy

divertido. Los trineos se pueden comprar en la tienda de regalos. Trineo se permite en la parte del recodo de Dunes Drive alrededor de milla 6 (9,7 km) de Dunes Drive. Seleccione un lugar para trineo que está lejos de las áreas de estacionamiento de carretera, y la vegetación.

### La arena, plantas, cristales de selenita, y los animales del monumento son tesoros nacionales.

os Parques Nacional están obligados a **L**proteger y preservar todos los recursos del parque para las generaciones actuales y futuras. Necesitamos su ayuda. Le pedimos que no quite ninguna planta, anímale, arena o cualquier otro objeto natural o cultural. Si cada visitante llevó algo con ellos, esto tendría un gran impacto sobre lo que las generaciones futuras podrían encontrar aquí, en White Sands National Monument. También es una violación de la ley federal (36 CFR 2.1) que lleva una multa grande y puede resultar en cargos criminales.

### Las pruebas de misiles y cierres de carreteras

White Sands Missile Range conduce pruebas de misiles y tecnología especial, a vez en cuando esto requiere que cierren la carretera 70 al tráfico. Según el tipo de prueba, también nos obligan a cerrar Dunes Drive por unas horas. Durante los cierres de carreteras, el centro de visitantes está abierto. Pueden explorar las exhibiciones del museo; visitar la librería o tienda de regalos, mientras esperan a que todo vuelva a abrir. Si usted está planeando visitar a White Sands National Monument y le gustaría saber si la carretera o el monumento está cerrado, llámenos al (575) 479-6124, ext. 236 o visita el sito web:www.nps.gov/whsa.

### Cómo Mantenerse Seguro

### • ¡Bebe mucha agua!

Es posible que no se dé cuenta que se está deshidratado porque no está sudando. Le recomendamos un galón de agua por persona al día.

# Agotamiento por calor puede ocurrir rápidamente. Tome descansos frecuentes

### fuera del sol. Todas las mesas de picnic están sombreadas. Mientras toma un descanso, asegúrese de beber agua para ayudar a su cuerpo recuperarse del calor.

### ¡Siempre sepa dónde está!

ELa primavera es nuestra temporada de vientos. Los vientos mueven las dunas y borrar sus huellas. Utilice senderos marcados del parque, lleve una brújula y mantenga puntos de referencia a la vista. Nunca vaya a explorar solo.

### ¡Estarte preparado!

Use un sombrero y gafas de sol. Aplique protector solar en todas las partes del cuerpo expuestas porque la arena refleja el sol. Use ropa suelta y de colores claros para avudarle mantenerte fresco.

### ¡Cavar es peligroso!

Cavando hoyos en las dunas es divertido, pero tenga en mente que las dunas se mueven y la arena es pesada. Los agujeros pueden derrumbarse sobre usted, y lo pueden asfixiar.

### ¡Evite la amenaza de los relámpagos!

Sea cauteloso de los relámpagos. Pueden ocurrir incluso en ausencia de la lluvia Si usted está en el campo de dunas durante una tormenta eléctrica, refúgiese en un estructura sólida que tiene puertas que se puedan cerrar como nuestros baños o en su vehículo. Si no está cerca de los refugios, póngase en una sentadilla baja y ponga sus manos sobre los oídos y la cabeza entre las rodillas.









in 1946



# Sunset Strolls Take a leisurely one-

Take a leisurely one-hour, ranger-guided walk through the sand dunes and learn about the geology, plants, and animals of this unique area. Offered daily one hour before sunset. Program is free.

Skins and Skulls
Toin a ranger and learn

Join a ranger and learn how to identify many of the animals at White Sands National Monument. Daily at 3 pm Memorial Day through Labor Day and weekends the rest of the year. Program is free.

**Tent Talks** 

Offered daily Memorial Day through Labor Day and weekends the rest of the year. Begins at 10 am at the Boardwalk. Program is free.

Full Moon Hikes Enjoy an hike under the full moon with a ranger once a month from May through October. Reservations required. Program and entrance fees apply. For more information, visit ww.nps.gov/whsa.

Sunrise Photography

October 17, 2015 at 6:30 am. Join a ranger for an early morning program on sunrise photography. Reservations required. Program and entrance fees apply. Register at www.nps.gov/whsa.

Full Moon Nights
Join us beneath a barrier Join us beneath a beautiful full moon for an evening of fun and enjoyment. Program is presented on the night of the full moon from May through October. Topics vary. No reservations required. Program is free. For more information, visit www.nps.gov/whsa.

Full Moon Bike Ride
Friday, September 25, 2015 at 8 p.m. Take a leisurely bike ride through the monument. No cars are allowed during the event. Reservations required and accepted one month in advance. Program and entrance fees apply. Visit www.nps.gov/whsa for more information.

Step into the Past
Join us for a one-hour pro-

Join us for a one-hour program on the history of the Tularosa Basin. Presented every other month. Topics vary. Visit our website at www.nps.gov/whsa for dates and details.

## **Hiking White Sands**

Tenturing out onto any of our five established trails **V** provides you with an opportunity to experience the timeless majesty and wonder of the dunes. We invite you to take a trek into the heart of dunefield and explore this magnificent place.

**Playa Trail** 

Length: 0.5 miles (0.8 m) round-trip Average Completion Time: 30 minutes Difficulty: Easy

The Playa Trail is a short, level hike leading to a small playa. Playas are shallow depressions or low-lying areas that temporarily fill with rainwater from storms.

### **Dune Life Nature Trail**

Length: One mile (1.6 km) loop Average Completion Time: 1 hour Difficulty: Moderate

Meet Katy the Kit Fox on this family-oriented trail and learn about the plants and animals common to the dunes.

# **Staying Safe**

**V** exciting experience but it is very important to safely enjoy the park. Please take a moment to read through the safety tips below.

### • Drink plenty of water!

You may not realize you are dehydrated because you are not sweating. We recommend one gallon of water per person per day. Eat plenty of high energy snacks like trail mix and granola to keep you going.

### Rest Often!

Heat illness can occur fast. Take frequent breaks out of the sun. All of the picnic tables are shaded. While taking a break, be sure to drink water to help your body recover from the heat.

### • Know where you are!

Spring is our windy season and wind erases your tracks. GPS can be unreliable. Use park trail markers, carry a compass and fully-charged cell phone. Keep landmarks in sight. Never hike alone.

### Be prepared!

Wear a hat and sunglasses. The sand reflects the sun so apply sunscreen to all exposed areas even in winter. Wear loose, light-colored clothing to help keep your body cooler.

### Dangerous digging!

Digging holes in the dunes is fun but keep in mind that the dunes move and the sand is heavy. Holes can collapse on you and which can lead to suffocation.

### Beware of lightning!

Be cautious of lightning storms, which can occur even in the absence of rain. If you are in the dunefield during a lightning storm, take cover in a solid, closed-door building like our restrooms or in your vehicle. If you are not near any of these shelters, squat low to the ground with your feet together and place your hands over your ears and your head between your knees. Remember "If you hear thunder roar, go indoors."

### **Interdune Boardwalk**

Length: 650 yards (585 m)

Average Completion Time: 20 minutes

Difficulty: Easy

Fully accessible for people using wheelchairs and strollers, the boardwalk leads you through a fragile interdune area.

### **Alkali Flat Trail**

Length: 5 miles (8 km) round-trip Average Completion Time: 3 hours Difficulty: Strenuous

Leading you through the heart of the dunes, the Alkali Flat Trail skirts the edge of what is now the final remnant of Lake Otero, once a 1,600-square-mile lake. Take plenty of water! Due to high summer temperatures, it is not recommended you hike this trail between

### **Backcountry Camping Trail**

Length: 2.2 miles (3.5 km) round-trip Average Completion Time: 1.5 hours

10am to 5pm from May through August.

Difficulty: Moderate

Hiked most frequently by backpackers, this trail is also open to visitors that want a shorter hike through the heart of the dunes.

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# Dunes

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### Alkali Flat Trail Sendero Alkali 12.8km West Filming Area **Amphitheater** Horse Area Yucca Picnic Area Roadrunner Picnic Area Área de picnic Yuca Área de picnic Roadrunner Primrose Picnic Area Backcountry Área de picnic Primrose Camping **Loop Trail** 9.7km Sendero de sitios Group Use Area remotos para acampai reservations required Zona para grupos requiere reservaciones Sunset Stroll 4.7mi Meeting Area 7.6km Zona de reunión para el Sunset Stroll **End of Pavement** Fin del pavimento --- Is Interdune Boardwalk Dune Life Nature Trail 2.3mi Sendero 3.7km autoquiado Dune Life ∤ Playa Trail Sendero Playa LEGEND CLAVE Parking Area O Special Use Reservation Required Areas cerradas Requiere reservaciones 0mi Fee 0km Station □ □ Taquilla de entrada Visitor Center | Gift Shop Centro de visitantes Tienda You Are Here To Alamogordo (14mi) To Las Cruces (45mi) A Alamogordo (23km) A Las Cruces (72km)

### Orientation Landmarks

Sacramento Mountains - 30 miles east of visitor center towards Alamogordo



San Andres Mountains - 20 miles west of visitor center towards Las Cruces



Sierra Blanca - 67 miles northeast of visitor center



White Water Tower - 1 mile southeast of visitor center



Tres Hermanos - 6 miles southeast of visitor center



### **A Special Map** For Safety!

Our georeferenced map will show you where you are in real time.

### Step 1:

Download Avenza PDF *Maps* app from Google Play or Apple Store to your mobile device.

### Step 2:

Scan the QR code below to download the georeferenced map from our website.

### Step 3:

Open the georeferenced map inside Avenza PDF Maps.

The little blue dot will show you where you are in the monument!



White Sands National Monument